

## **Jefferson County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 18 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Jefferson County economy.<sup>1</sup>

These 18 sectors have a total direct output of approximately \$156.2 million and support 1,189 jobs in Jefferson County. Running the model for all 18 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Jefferson County Economy									
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product			
Direct Effect	1188.5	16.56%	\$35,922,022	8.96%	\$156,198,887	38.97%			
Indirect Effect	103.5	1.44%	\$5,583,847	1.39%	\$12,528,955	3.13%			
Induced Effect	24.2	0.34%	\$1,680,692	0.42%	\$3,186,120	0.79%			
Total Effect	1316.2	18.34%	\$43,186,561	10.77%	\$171,913,963	42.89%			

As shown in the above table, agriculture, food, and food processing sectors support 1,316 jobs, or 18.34% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$171.9 million, roughly 42.89% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 18 agriculture, food, and food processing sectors is approximately \$43.2 million, or 10.77% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 10.77% of the total economy.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **684 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Jefferson County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	683.6	\$36,927,290			
Landscape and horticultural services	134.1	\$4,622,803			
Grain farming	79.4	\$13,943,383			
Animal, except poultry, slaughtering	70.4	\$50,831,593			
All other crop farming	64.5	\$2,373,013			
Oilseed farming	48.3	\$24,428,986			
Dairy cattle and milk production	40.6	\$16,564,334			
Veterinary services	29.8	\$2,364,509			
Truck transportation	18.1	\$2,986,416			
Support activities for agriculture and forestry	13.1	\$592,221			

The animal, except poultry, slaughtering sector directly contributes approximately \$50.8 million to the Jefferson County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Animal, except poultry, slaughtering	70.4	\$50,831,593		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	683.6	\$36,927,290		
Oilseed farming	48.3	\$24,428,986		
Dairy cattle and milk production	40.6	\$16,564,334		
Grain farming	79.4	\$13,943,383		
Landscape and horticultural services	134.1	\$4,622,803		
Truck transportation	18.1	\$2,986,416		
All other crop farming	64.5	\$2,373,013		
Veterinary services	29.8	\$2,364,509		
Wholesale trade	11.1	\$2,085,059		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Jefferson County economy.

All Agriculture, Food, and Food Processing Sectors					
Sector	Total Employment	Total Output			
Oilseed farming	48.3	\$24,428,986.00			
Grain farming	79.4	\$13,943,383.45			
Vegetable and melon farming	1.6	\$346,778.49			
Fruit farming	8.8	\$907,087.58			
Tree nut farming	0.6	\$71,061.60			
Greenhouse, nursery, and floriculture production	4.0	\$727,492.11			
All other crop farming	64.5	\$2,373,013.06			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	683.6	\$36,927,289.77			
Dairy cattle and milk production	40.6	\$16,564,333.73			
Poultry and egg production	0.7	\$447,553.60			
Animal production, except cattle and poultry and eggs	10.2	\$665,812.52			
Commercial logging	1.4	\$63,097.07			
Commercial hunting and trapping	2.9	\$59,091.40			
Animal, except poultry, slaughtering	70.4	\$50,831,593.47			
Bread and bakery product, except frozen, manufacturing	7.3	\$790,669.02			
Frozen cakes and other pastries manufacturing	0.4	\$64,332.05			
Veterinary services	29.8	\$2,364,509.46			
Landscape and horticultural services	134.1	\$4,622,802.86			

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Jefferson County, the retail sector was omitted.